

TAIG

JULY 1982

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MEETING NOTES: June 27, 1982

For anyone buying MOSAIC items, there are discount coupons available which allow a 10% discount over any other discount you may be receiving.

Only two people returned the questionnaire in the May newsletter. Since this could not be considered a statistically valid response, no results will be compiled.

Dan Levett volunteered to be custodian of a used 19 inch TV to be purchased for club use. He will have the use of it when it is not being used by the club.

Anyone who does not want his name to be published in the club membership directory should contact Dale Pantone (729-5152).

A swap & game meet was discussed and the consensus was that it should be at the Minn. Fed. S&L in the afternoon before a meeting. The date is yet to be established. A poll was taken to determine which games should be played and the top three choices were; Star Raiders in first with Missile Command and Pacman tied for second. To enter one must pay \$1.00 or bring a computer & TV.

Walt June of the CODE ROOM brought to our attention the new MN state policy on sales tax on software. You may now dig into your pockets for sales tax when you buy software categorized as ENTERTAINING or LEARNING. The third category, APPLICATIONS, is not taxable. It was suggested that a letter to your legislator protesting this policy would be an appropriate measure for anyone not in agreement with the wisdom of calling the code of Pacman tangible and the code of Filemanager intangible. (Thinking this through and knowing the competence and honor in which legislatures deal, I am reminded of the joke of the unfortunate with a deformed left hand praying that both hands be made the same, and finding his right hand also became deformed.)

FOR SALE

16K board-\$40.00 Mike Tourpile 770-2369

16K board-\$40.00 Tom Tolstad 425-9409

800/40K+disk+cassette+2 joysticks+manuals-\$950.00 c/o Mike Doleman 861-1893

THE GRAPEVINE

From the San Diego ACE- (rumor) Percom disk drives have trouble in the double density mode. They crash the VTOC. Otherwise they work great in single density mode. They format in hard sector mode which causes a problem when you flip the disk.

From ACE, Eugene,OR, Benioff At Large- The new ATARI printer will be the Centronics 739..... ATARI's new machines will be released in December. The 1000 and 600 are the talk of the town.

From JACG, New Jersey- (Earl Rice and Mark Cator)...reported that the "800" number is now 800-538-8543 and it services a rotating series of 20 phones.

ATARI USER GROUP LOGO CONTEST

This is what you call short notice, but short notice is better than no notice. Atari is having a logo contest in which each user group may enter 2 logos designed by members. The designer of the winning logo will receive the COMMUNICATOR (TM) KIT, \$350.00 Compuserve access time, and membership

plus 10 hrs access to Comp#U*Star. The entry must be recieved at ATARI by AUG.1, so if you want to enter, bring your design to the July TAIG meeting. If more than 2 entries are brought, we will have a vote to deside the 2 best.

CHILDREN WILL PLAY

by Phil Seifert

The rumors of my death were greatly exaggerated. I escaped from the thieves by quitting. Maybe I shouldn't have left Zork because there doesn't seem to be a whole lot of new and exciting programs out.

However, there is one company that put out a slew of new programs, Datasoft. Within a few months, they have released Tumble Bugs, Canyon Climber, Pacific Coast Highway, Shooting Arcade, and Clowns and Balloons. Since the last meeting, I have purchased Shooting Arcade and Clowns and Balloons. Of the two I prefer clowns popping balloons, mainly because of the music. Each

program sells for \$30.00. I think most require 16k memory. Pacific Coast Highway, Clowns and Balloons, and Canyon Climber I know to be available on cassette. Maybe there is life after a cassette?

For those of you who like wargames, there is a program just released from Strategic Simulations called The Battle of Shiloh. If you have \$40.00 and 40k then see if you are a better commander then the civil war generals. This program is a big improvement from their earlier release, Shattered Alliance. It loads faster and has fine scrolling horizontally. I might just pick it up if I can find some money.

A different type of wargame is Hayden's Reversal, a rather good Othello program. It comes on cassette and plays a mean game. I highly recommend this one if you like Othello and don't mind being beaten.

Upper Reaches of Apshai has just hit the stores around here. It is an expansion module to your Temple of Apshai. It costs \$20.00 to add four more levels for your adventuring pleasure. The program requires the Temple of Apshai program.

Broderbund fans shouldn't have too long to wait for a new program, Track Attack. This game involves stealing the gold off a train, running around to discourage you is a phantom car. This game has average graphics (for machine language) and keeps a permanent high score on the disk. That means we can't lie about our scores now, can we?

Speaking of high scores, it is my pleasure to announce the first Star Commander Class 1 in Star Raiders (at least the only one reported to me from within the group). Congratulations Vint Knechtges! He says the secret is not to smoke, drink little alcohol, and abstain from the opposite sex.

If you don't believe that then he really said use as little energy as possible, get all the twos first, then the threes, and finally fours. It also helps not to be hit by enemy fire. Also the high score on Jawbreaker has been broken. Former record holder, Rod Smoliak increased his score from 43,900 to 45,580. However, he let his wife, Liz, play and she got a score of 47,300. Let's hear it for the weaker sex! If you have a Pac-Man cartridge, I have a score for you to beat. Dave Schultz scored 101,760. If you really want some of my high scores to beat, here they are; Shooting Arcade 43,520, Threshold 212,100 (dang boomerangs get me every time), and Krazy Shootout 35,740. Remember, if you beat these scores tell me.

The updated Crush, Crumble and Chomp is released for those of you with GTIA chips. Also Ghost Hunter is fixed for the revision B roms. Unfortunately, I have found another program that won't work with the new roms. Star Base Hyperion just keeps on spinning when I try to boot my copy. If you are going to buy this game, please check to see if it will work with the new roms. If it does, CONTACT ME IMMEDIATELY! I want to play.

I would recommend purchasing your software at a local computer store. The ones I have been to let me try out the new stuff and give me great service besides. Let me see that from a mail order vendor. I recently got stiffed by one firm called Adventure International. They advertised last November Stone of Sisyphus. After waiting several months for the program, I had to make two calls to Florida to get my money back. They only sent back the purchase price of the program and not the \$2.00 they wanted for shipping and handling. I guess it cost them that much to send me three letters saying they hadn't forgotten my order. From now on, I plan to buy software from the local dealer and so should you.

Adventure International's Preppie is out now. Don't ask me what it is.

I am going to sign off now, I want to get back to Star Raiders.

NEWS FROM THE LIBRARY

The July disk of the month contains the following programs.

Bowl.ss	bowling game
Americas	quiz on Americas
States	quiz on U.S.A.
Aptitude	rates programming aptitude
Cards.cor	card drawing subroutine
Disktape	backup diskfiles on tape
Magic	old magic trick
Towers	tower of hanoi game
Runway	land an airplane
Civilwar	Classic program
Alien.ss	missile command type

String.cre	creates string from memory
Memdump	memory dump

Both the free and pay libraries contain the same programs as last month. We have modified the rules for acquiring programs again. You can now purchase our pay library programs at the meetings. To obtain the free stuff, you still have to order it. If you want the programs before the next meeting, then include \$1.00 for postage. Please supply Manila Envelopes with your name and address on it, okay? You can order programs from me by mail. Address it to Phil Seifert, 48 Kelly Road, Chaska, MN 55318. Our disk of the month(\$4.00) is a disk full of free programs made up before the meetings. Past disks are available for sale at the meetings or by mail. This month, there will be a few disk full of files for the Music Composer(\$4.00). All programs on the disk of the month are available from the free library for cassettes. If any one would like to volunteer their time or information on how to mass produce cassettes, please contact me. I would like to get out a cassette of the month too. See you at the meeting.

HIGH RESOLUTION SCREEN DUMPING by Dale Lindblad

If you have an EPSON printer with graphics chips, there is a short BASIC subroutine that can be added to a main program to dump a MODE 8 or 24 screen. This routine excludes player-missile graphics and the text in the 4-line text window of GRAPHICS MODE 8.

By obtaining the start of DISPLAY MEMORY from the DISPLAY LIST used by the ANTIC chip for screen refreshing, bytes can be read directly from the display and printed. Each byte contains 8 pixels of screen information (on or off).

The resulting picture is rotated 90 degrees clockwise due to the way the ANTIC chip in the ATARI requires 8-bit bytes arranged for screen refreshing and the way EPSON requires 8-bit bytes arranged for graphics printing. In a nutshell, ANTIC displays bytes horizontally and EPSON displays bytes vertically, so we let ANTIC have it's way and program the EPSON to handle this difference.

DISPLAY MEMORY ARRANGEMENT (MODE 8) PROPERTIES:

- A. 192 scan lines (vertical resolution)
- B. 40 bytes each scan line (7680 bytes total)
- C. 1 byte controls 8 pixels (on or off)
- D. 40 times 8 = 320 (horizontal resolution)

To illustrate those properties with an example, consider a screen

display that has two "on" dots on the first line in the upper left corner that are separated by six "off" dots.

```
-----
/ *      *
/
:
:
:
```

The top line, and each horizontal line, has 320 pixels 8 per byte. The two "on" dots are in the first 8 pixels and so are both part of the first display byte. The left dot is in the 7-bit(factor 128) position; the right dot is in the 0-bit position(factor 1). The value of the first display byte is thus 129. Since it is assumed that those are the only two "on" dots, each of the other 7679 display bytes is zero.

EXAMPLE-- PLOT 0,0:PLOT 7,0
UPPER LEFT CORNER OF SCREEN

1st byte=129 2nd byte=0

```
1
2
8 1
```

```
-----
/ *0000000*00000000.....40th byte
/ 1st scan line
```

```
:
: 00000000
: 41st byte--2nd scan line
:
:
:
: 192nd scan line
```

EPSON PRINT HEAD IN GRAPHICS MODE
EXAMPLE-- printing an 8-bit byte (129)

```
129 * pin 1
      0
      0
      0
      0
      0
      0
      0
1 * pin 8
```

0 pin 9 (not accessed)

READ AND PRINT DISPLAY MEMORY
 A. 40 8-bit vertical lines (320 vertical res)
 B. 192 bytes per line (192 horizontal res)
 BOTTOM-LEFT CORNER OF SCREEN

```

-----
/0
/ 0
| 0
| 0 ---->print direction
| 0
| 0
| 0
| 0
| 0
|-----
|
|

```

--- THE SUBROUTINE ---

```

31000 REM -- FIND BEGINNING OF DISPLAY MEMORY
31010 STRT=PEEK(741)+256*PEEK(742)
31015 ADDR=PEEK(STRT+5)+256*PEEK(STRT+6)
31020 OPEN #3,8,0,"P:"
31030 REM -- SET LINE FEED ADVANCE TO 8 DOTS
31040 ? #3;CHR$(27);"A";CHR$(8);
31050 REM -- PRINT 40 LINES OF 8 VERTICAL DOTS
31060 FOR GI=0 TO 39
31070 REM -- HOME PRINT HEAD (PREVENTS SHORT LINE SEEKING)
31080 ? #3;CHR$(27);CHR$(60)
31090 REM -- PRINT 192 HORIZONTAL DOTS PER LINE
31100 ? #3;CHR$(27);"K";CHR$(192);CHR$(0);
31110 REM -- LOOP BY 40 BYTES FROM BEGINNING OF DISPLAY MEMORY + 7680 - 40
      TO THE BEGINNING OF DISPLAY MEMORY
31120 FOR GJ=7640 TO 0 STEP -40
31130 ? #3;CHR$(PEEK(ADDR+GI+GJ))
31140 NEXT GJ
31150 NEXT GI
31160 CLOSE #3
31170 LPRINT :LPRINT :LPRINT:RETURN

```

YOU CAN REDUCE THIS ROUTINE TO ABOUT 4 LINES.

NOTE: You can do INVERSE printing by changing--

```

31130 ? #3;CHR$(255-PEEK(ADDR+GI+GJ))

```

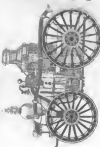
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INTEREST GROUP

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RICHFIELD, MN 55423

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554

Fire Pumper
1860s
USA 20c



TAIG Meeting Notice
Sunday July 25th, 7:00 P.M.
Minnesota Federal S & L
31 9th Avenue, Hopkins

Machine Language Tutorial 6:00 P.M.